April 2016

# GAS PIPELINE SAFETY GUIDE





#### AT VECTOR WE WANT TO KEEP ALL CONTRACTORS, CUSTOMERS AND THE PUBLIC SAFE.

Whenever you are digging on private or public property near natural gas pipelines, there is a serious risk to life and property if these pipes are damaged.

External interference is the leading cause of gas pipeline incidents, most commonly the use of excavation and directional drilling equipment.

This booklet is a guide to safe working practices when working near our gas pipelines and provides information about the services we have to help you.

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## VECTOR'S SERVICES TO HELP YOU WORK SAFELY

We provide a number of services to help people work safely around our gas pipelines:

- Reference maps that indicate the approximate location of our distribution pipelines.
- Close Approach Consents, required for all works within one metre of strategic gas distribution pipelines.
- Pipeline safety awareness seminars, on request.
- Gas disconnections.

#### **PLANNING YOUR WORK**

It takes time to arrange these services, so plan your work carefully and call us in advance. Allow two working days for reference maps and Close Approach Consents, and up to 10 days for disconnections.

#### YOUR LEGAL REQUIREMENTS

The Ministry of Business, Innovation & Employment (MBIE) has minimum safe work practices for carrying out any work near gas pipelines. Its 'Guide for Safety with Underground Services' states; "All underground services shall be physically identified, by way of pot holing using hand tools only, before any excavation can be carried out with machinery."

There are also laws and regulations which specify safe working practices that must be followed:

- Gas Act 1992 and amendments.
- Health and Safety at Work Act, 2015.
- Health and Safety in Employment (Pipeline) Regulations 1999.

ANYONE WHO DAMAGES A GAS PIPELINE AS A RESULT OF UNSAFE WORK PRACTICES COULD BE INVESTIGATED BY WORKSAFE AND IS LIABLE TO PROSECUTION.

Vector may take legal action to recover both the cost of repairs and the cost of lost business from any party or parties responsible for damaging our pipelines.

#### DON'T FORGET ABOUT TRANSMISSION PIPELINES CALL FIRST GAS ON 0800 734 567

The transmission company will require you to obtain a permit when working near its pipelines.

#### THE DANGERS

If you hit a gas pipeline there is the risk of:

- Gas igniting, causing fire and serious harm to life and property.
- Gas accumulating in adjacent buildings and structures, which has the potential to ignite and explode.
- Air getting into the gas pipe and forming an explosive mixture.

# WORKING SAFELY AROUND NATURAL GAS PIPELINES

Before you begin any excavation or directional drilling work:

#### **STEP 1.** GET REFERENCE MAPS

Request plans via **www.beforeudig.co.nz** at least two working days before you begin work and we'll provide reference maps by email indicating pipeline locations.

#### **REFERENCE MAPS**

Are provided via email and are valid for 28 days from date of issue. After 28 days you must request new maps. The accuracy of our maps cannot always be guaranteed. Road realignment, reconstruction, alterations to ground cover and property boundaries can all affect accuracy. You must hand dig to confirm the location of our pipes within your worksite before you start work.

#### **STEP 2.** MARK OUT THE PIPELINE LOCATIONS

Use the reference maps as a guide for locating and marking out all pipes within your worksite.

Vector reminds you of your responsibilities under the Health and Safety at Work Act, 2015, whereby you must establish the location of underground services before commencing excavation.



# **STEP 3.** HAND DIG TO EXPOSE PIPES

Why hand dig? Hand digging is less likely to cause serious damage to pipes. You must dig with caution for your own safety. Any damage to a pipe should be reported to Vector immediately.

Remember to watch out for customer service pipes coming off a main.



## **CLOSE APPROACH CONSENTS**

If strategic assets are shown on the reference maps you have requested, we will contact you to arrange for a *Close Approach Consent* to be issued.

NOTE: Close Approach Consents are only valid for the dates, location and type of works as stipulated on the consent.

## **DISTRIBUTION PIPELINE DEPTHS**

Our distribution pipes are laid at different depths. These may vary from just under the surface to over 1200mm. Customer service pipes are generally between 300mm and 1000mm deep.

We cannot guarantee the depth of any pipe because alterations to the ground cover may reduce or increase the depths.

Do not rely on finding buried marker tape when you dig, as this may not be present if the pipeline was installed by directional drill or thrusting.

NEVER ASSUME YOU KNOW EXACTLY WHERE THE PIPELINE IS LOCATED -ALWAYS CONTACT US.

DISTRIBUTION PIPELINES DIAL BEFORE YOU DIG 0508 B4U WORK (0508 248 967)

# SAFE DIGGING CHECKLIST

- Get reference maps.
- Locate the gas pipeline:
  - Mark out.
  - Use a pipeline locator.
  - Hand dig to confirm the location of the pipeline.
  - Watch out for customer service pipes coming off the main.
- Get a Close Approach Consent for all work within one metre of a strategic gas pipeline. You will be advised of this when your maps are issued

#### **REMEMBER:**

- The actual location and depth of pipes can differ from what's on our maps because site conditions can change over time.
- Follow the Department of Labour's 'Guide for Safety with Underground Services'.

#### DISCONNECT BEFORE YOU REMOVE OR DEMOLISH A BUILDING

For your own safety, you must have the gas service permanently disconnected from Vector's gas network in the street and have the meter removed before you demolish or remove a building.

Contact the gas retailer or Vector on 0800 447 447 for disconnections. You should allow 10 working days' notice. Charges may apply.



## WHAT TO DO IN AN EMERGENCY

If you hit a gas pipeline, or smell or hear gas escaping:

- Switch off all machinery and remove all sources of ignition, including mobile phones.
- Move at least 20 metres away.
- Call the fire service on 111 and then Vector on 0800 764 764.
- Evacuate the immediate area.
- Leave the damaged pipe to vent.
- DO NOT try to cover the damaged pipe with any material, including digger buckets.
- DO NOT attempt to squeeze off the pipe.
- DO NOT start any vehicles for removal.
- DO NOT attempt to extinguish ignited gas fires.
- DO NOT inhale fumes.

VECTOR EMERGENCY CONTACT NUMBER: 0800 764 764

NATURAL GAS PIPELINES DIAL BEFORE YOU DIG 0508 B4U WORK (0508 248 967)

## **REPORT ALL DAMAGE TO PIPELINES**

In the event of any damage, no matter how minor it may appear, it is essential that you notify Vector immediately. Any damage to the coating or denting of the pipe could seriously impact the integrity, or shorten the life of the pipeline. Never try to repair the pipeline yourself. Repairs must only be made under Vector supervision or by a Vector representative.

YOU CAN HELP US KEEP THE PIPELINES SAFE BY REPORTING ANY PIPELINE EXPOSURE, DAMAGE OR SIGNS OF DEFECTS THAT COULD PUT THE PIPELINES AT RISK.

#### **ABOUT US**

We are focused on meeting the energy needs of more than 600,000 customers across the country. We keep the lights on and the gas flowing in Auckland, and are a provider of metering, LPG and fibre-optics nationwide. Our services are crucial to New Zealand's economic success. We also have a strong record of health, safety and environmental leadership.

#### www.vector.co.nz

DISTRIBUTION PIPELINES DIAL BEFORE YOU DIG 0508 B4U WORK (0508 248 967)

## **CONTACT US**

**REFERENCE MAPS** 

- · 0508 248 967
- or visit www.beforeudig.co.nz

#### CLOSE APPROACH CONSENTS AND SAFETY ADVICE

• 0508 248 967

EMERGENCIES

• 0800 764 764

DISCONNECTIONS

• 0800 447 447

#### Head office:

101 Carlton Gore Road, PO Box 99882, Newmarket, Auckland 1023. Ph 09 978 7788

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#### GAS NETWORKS IN AUCKLAND







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